



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

which had been incidentally suggested by the Paper. It appeared that there is a very large drainage running into the White Nile from the Bahr-el-Ghazal. We had got some notion of the quantity of water which came down from the lake discovered by Captain Speke and Captain Grant. During the present season there had been a disastrous inundation of the Nile in Egypt, causing an immense loss of property and a considerable loss of life. Now, this inundation had arisen from natural causes which it was the duty of science to endeavour to discover; he therefore thought it would be very desirable that some steps should be taken by the scientific gentleman who was accompanying the ladies, upon his return, to compare the outflow of water from the Bahr-el-Ghazal with the outflow from the White Nile. That comparison would enable us to judge to a certain extent as to the amount of country drained by these two outfalls. We now knew where the White Nile came from, but we did not know the extent of the country whose waters drained into the Bahr-el-Ghazal. It might turn out that a considerable, possibly the larger, proportion of the water which formed the inundation of the Nile came from that quarter, and not from the White Nile. Therefore, a careful comparison of the quantity of water discharged by these two confluent rivers would be most valuable for the purposes of science.

The PRESIDENT said they were extremely indebted to Lord Donoughmore for this suggestion. He might observe that the ladies were really on the right road to obtain this knowledge; for their great object was to reach the mountainous region whence the Bahr-el-Ghazal flowed. Should they succeed in reaching that region—which he was in hopes they would, notwithstanding the dissuasion of Captains Speke and Grant—and should they discover that its waters are thrown off to the Nile on the one side, and to Lake Tchad and the other great lakes to the westward on the other, it would be a most important geographical result.

MR. TINNE stated that Dr. Heuglin corresponded with 'Petermann's Journal,' a recent number of which contains a series of valuable astronomical and scientific observations which Dr. Heuglin had transmitted to Germany. (This number unfortunately has not yet been forwarded to the Society.)

The PRESIDENT then read a letter from M. Du Chaillu, announcing his arrival at Acra, and stating that, having become a proficient in astronomical observation, he hoped soon to send most useful information, and thanked the Society for the assistance they had rendered him by supplying instruments, &c.

2. The next Paper, detailed in an abridged form, the observations of COLONEL PELLY on the geographical capabilities of the Persian Gulf as an area of trade.

COLONEL PELLY first describes the different suzerainties of the territories abutting on the Gulf, and briefly notices the various tribes that inhabit its shores—as the Chaab Arabs from the Karoon to the Hindéean; the territory directly held under the Shah, extending from Bushire to Lingah; territory leased by the Shah to the Imaum of Muscat, consisting of Bunder-Abbass and the coast northwards to Lingah, and southwards to a point not definitely specified by treaty, but tacitly recognised, as also the island of Kishm (on which is Hormuz) and its dependencies; territory of the Imaum

of Muscat, including Cape Ras Mussendom (south side of Straits), extending to El Khatif, and subject to independent maritime Arab chiefs, erstwhile pirates of the Gulf; territory of Nejd, from El Khatif to Koweit, professing allegiance to Turkey, but virtually independent; and, lastly, territory governed by Turkish pashas from Koweit to Busreh or Bussöra. It then describes the appearance of the country, consisting of vast green fields with herbage at all times suitable for sheep, and generally for cattle, till Bunder Dielum is reached in Persia Proper, near which are the remains of ancient cities of immense extent, where the plain merges in low sandstone and earthy hills. After passing another fine plain with ruins and the bed of an ancient stream whose waters are traditionally alleged to have been diverted by an earthquake, Bushire, the principal port of the Gulf, is reached, described as possessing by no means suitable accommodation for the trade that centres there, a large proportion of which is cotton.

From Bushire southward is a ridge of barren mountains, at the base of which nestle villages more or less wretched. Bunder-Abbass Colonel Pelly speaks of as being the best point for deep-sea vessels to stop at, so as to transfer cargo, either to go up the Gulf to Koweit and Bussora, or across by Yezd to a line extending from Herat on the east by Balfrush, Ispahan, and Teheran, to Tabreez, and so communicating direct with Central Asia. The port he describes as superior to that of Bushire, while Mussendom, on the opposite side, where the submarine telegraph from Bushire is to have its first station going eastward, has every facility on its western face for being made a coaling station.

The PRESIDENT observed that Colonel Pelly was brought up under the auspices of Sir Henry Rawlinson, from whom he hoped in the course of the evening to hear some remarks in connexion with the great telegraphic communication between England and India, which it was proposed to carry along this line of country. In the mean time he would ask for a few observations from Mr. Lynch, who was well acquainted with the Persian Gulf.

MR. LYNCH said the Paper gave an interesting and correct description of the northern part of the Persian Gulf. But Colonel Pelly was mistaken in supposing that Bunder-Abbass was the port of Shiraz. It was the port of Kerman, Yezd, and indirectly of Ispahan, but Bushire was the port of Shiraz and Ispahan. Bunder-Abbass was a very fine port, with at least 14 fathom water close in shore, and no doubt with the introduction of railways in Persia it would be of great importance. The physical features of the country were in its favour, for to the eastward there was a vast range of mountains; spurs of the Taurus, called the Elburz and Bukhtarian and Luristan ranges, extend along the eastern coast of the Gulf of Persia; whereas at Bunder-Abbass there was all open plain, which extended right up into the heart of Persia, first to Yezd, and thence to Ispahan. In former times Hormuz was the great emporium for this part of Persia. Its insular situation secured for it protection on the land side during the disturbed state of the country when it was governed

by the Tartars and Turks; and the Portuguese made it a grand *dépôt* for the commodities of Europe, which when opportunity offered they sent into the interior in caravans, which traverse the country from Bussora to Damascus on one side, and to the capital of Timur on the other, and opposite Bunder-Abbass. When Persia becomes more enlightened and more amenable to civilisation, Bussora and Bagdad will, however, command the whole trade of this country. Merchandise will follow the water-line, and at Bussora and Bagdad it would find a much better access into the interior than from Bunder-Abbass, the country round which is remarkably desert and inhospitable, and its climate most prejudicial to European constitutions. From Bagdad to Ispahan was 20 days' journey by caravan, whereas from Bunder-Abbass it was nearer 30 days.

SIR HENRY RAWLINSON said it was only fair to Colonel Pelly to state that the Paper consisted merely of a few detached geographical facts culled from a very long and able Report on the general state of the Persian Gulf, which embraced political considerations mainly, together with statistics of trade and a variety of other matters.

Of Colonel Pelly himself he also wished to say a few words as a most deserving officer and a really good geographer. He is an infantry officer on the Bombay establishment, the same service which has produced Outram and a number of well-known historical characters. He graduated in Scinde, under Colonel Jacob and Sir Bartle Frere. He afterwards joined Sir Henry Rawlinson as Secretary of Legation at Teheran. After Sir Henry quitted Persia, Colonel Pelly travelled direct through Afghanistan from Teheran to India, being the only European travelling singly who has passed through since the time of the Afghan war. After that he went to Zanzibar, where he assisted Baron von Decken in his journeys into the interior. From Zanzibar he was removed to the Persian Gulf, where he is now political resident. Colonel Pelly had always appeared to him as a real type of the Indian officer of the old school—as hard as iron, plastic, ambitious, full of talent and energy, and ready for any work.

There were two points of interest in the Paper. The first was that the particular line of coast which Colonel Pelly had described was part of the great line of telegraph which is being laid down between England and India. From the mouth of the Euphrates the line will be laid submarine to Bushire; from Bushire it will follow down the coast the whole way to a point opposite Bunder-Abbass, where there will be a great telegraph-station; and from that point it will be continued along the coast of Mekran to Guadeh, and thence by land to Kurrachee. It was formerly proposed to bring the alternative line through Persia, down by land to Bunder-Abbass; but the Persian Government were obliged to give up the idea, because they could not protect it in the interior.* That alone would show what the country must be in the interior, and how hopeless it would be to expect to conduct a line of caravan communication into the interior from Bunder-Abbass. Bushire is the natural port of Shiraz; but if the interior could be pacified, no doubt Bunder-Abbass would be the proper line to Kerman and Yezd, and thence to Khorassan on the right, and Irak on the left.

The other point to which he wished to draw attention—and he was sure it would be interesting to Mr. Crawford—was with regard to cotton. He believed there was not a better cotton country in the whole world than all that region which Colonel Pelly had described lying to the north of the Persian Gulf. It had been very little brought before the English public. We had heard of Queensland, of the west coast of Africa, of Egypt, and the outlying regions of Turkey; but the country which he believed of all others was the most acces-

* This "alternative" line will, as at present designed, unite with the direct line at Bushire.—[Ed.]

sible, and the best qualified with regard to soil, climate, irrigation, and water-carriage, was this province at the head of the Persian Gulf, which had been almost overlooked.

MR. CRAWFURD asked what was the quality of the cotton.

SIR HENRY RAWLINSON replied, Sea-island long staple. He might mention that a sample produced at Bussora had been compared with the best Sea-island by American merchants, and they did not distinguish any difference. The country available belonging to Turkey was 500 miles in length, extending down the valley of the Tigris and the Euphrates, every inch of which was perfectly open and adapted to cotton cultivation. It was a fine alluvial soil, and with the Tigris on one side, and the Euphrates on the other, the whole country could be reticulated with a series of canals from one end to the other. The same advantages would apply, though, perhaps, in a less degree, to the country to the east, which Colonel Pelly had been describing—to the country below the mountains, which constituted the ancient province of Susiana. In ancient times this province of Babylonia was the seat of great capitals, and Herodotus tells us that it paid one-third of the whole grain-revenue of the great empire of Cyrus, which extended from Egypt on the west, to Cashmere on the east. This was sufficient evidence of the natural capabilities of the country, and it was astonishing when we were looking everywhere for cotton fields that the great valley of the Tigris and Euphrates should have been so completely neglected.

MR. CRAWFURD said, notwithstanding we had been paying a bounty of 200 per cent. for cotton during the last two years and a half, Persia—which was so productive and so promising, according to Sir Henry Rawlinson—produced only 1500 bales out of the 2,000,000 that we required. Still, what Sir Henry had said as to the capabilities of the country was quite correct. If the country were well governed, and capital were introduced, the valley of the Tigris and Euphrates might be made, no doubt, one of the most productive plains in the whole world. Neither the valley of the Nile nor the valley of the Ganges excelled it in fertility. It could produce abundance of good cotton, but he doubted the advantage of growing Sea-island cotton. Sea-island cotton was fine in quality, but the quantity per acre was about one-half that of ordinary cotton. It would be far more profitable to produce good common cotton of the description that is chiefly consumed in this country.

With respect to the ports on that coast, he thought Kurrachee would become a great and important emporium. It commanded the trade and navigation of all the countries upon the great river Indus up to Lahore, just as Calcutta commanded the trade of the valley of the Ganges. Kurrachee was cutting off a considerable portion of the trade of Bombay.

This closed the discussion, and the Meeting was then adjourned to 14th December.
